

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.

























# **WATER SUPPLY OUTLOOK FOR IDAHO**

U. S. DEPT. OF AGRICULTURE  
NATIONAL AGRICULTURAL LIBRARY

JAN 29 1969

CURRENT SERIAL RECORDS

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,  
and

IDAHO STATE RECLAMATION ENGINEER

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF  
JAN. 1, 1969

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80521
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia





248513

# ***WATER SUPPLY OUTLOOK FOR IDAHO***

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

*Issued by*

**D.A. WILLIAMS**  
ADMINISTRATOR  
SOIL CONSERVATION SERVICE  
WASHINGTON D C

|||||  
*Released by*

**LEE T. MORGAN**  
STATE CONSERVATIONIST  
SOIL CONSERVATION SERVICE  
BOISE, IDAHO

*In Cooperation with*

**R. KEITH HIGGINSON**  
STATE RECLAMATION ENGINEER  
DEPARTMENT OF RECLAMATION  
BOISE, IDAHO

|||||  
*Report prepared by*

**MORLAN W. NELSON, Snow Survey Supervisor**  
and

**J. ALDEN WILSON, Assistant Snow Survey Supervisor**

SOIL CONSERVATION SERVICE  
SNOW SURVEY SECTION  
P.O. BOX 38, BOISE, IDAHO 83707





# WATER SUPPLY OUTLOOK for IDAHO

## GENERAL SUMMARY FOR JANUARY 1, 1969

The combination of wet soils and heavy snowfall in 1968 has resulted in a forecast of above normal streamflow and the potential for damaging runoff on low elevation streams in Idaho.

The water supply for 1969 began to develop during the heavy rains in the latter part of August 1968. Snow actually started to accumulate before the first of September at the high elevations and has continued to fall at an above normal rate. The heavy fall rains primed the soils on all of the watersheds throughout the state.

Snow cover now varies from 3% on the Upper Snake River to 70% above normal on Goose Creek in southern Idaho. The combination of excellent soil moisture beneath the snow and above normal snowpack strongly indicate the possibility of a good water supply in general for 1969.

Reservoir storage on the major rivers is near normal as a result of last fall's heavy rains and excellent winter flow to date.

The Boise Front snow cover and soil moisture conditions indicate a potential for high fast runoff if a chinook accompanied by warm rains should occur. The soil mantle on the Boise Front is saturated and an unusually heavy snowpack has fallen on the saturated soil. The soil is unfrozen which is a good condition, but its ability to absorb moisture is very much reduced because it is saturated.

This winter season has produced saturated soils and a heavy snowpack at low elevations. This combination under a fast melt through warm rains or chinook winds could cause damaging runoff on many small watersheds throughout the state.

On those drainages where cities such as Boise, Idaho Falls, and Pocatello may be affected by high runoff, special snow survey and soil moisture measurements will be made after each heavy storm. These surveys will evaluate the potential runoff represented by the snowpack and soil moisture.

2

COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO.OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1953-67 AVERAGE
<u>UPPER COLUMBIA RIVER BASIN</u>			
Pend Oreille River	13	138	130
Clark Fork River	10	137	132
Flathead River	3	139	122
Priest River	2-4	168	108
Spokane River	2	151	117
<u>LOWER SNAKE RIVER BASIN</u>			
Palouse River	5	325	154
Clearwater River	1-20	124	140
Salmon River	8-19	146	119
Lemhi River	7	144	--
<u>MIDDLE SNAKE RIVER BASIN - Northside</u>			
Little Lost River	5	158	144
Big Lost River	1	93	134
Little Wood River	2	164	112
Big Wood River	4	170	114
Boise River	3	267	134
Payette River	6	200	122
Weiser River	1	141	131
<u>MIDDLE SNAKE RIVER BASIN - Southside</u>			
Raft River	1	313	150
Goose Creek	1	329	170
Salmon Falls Creek	3-6	151	125
Bruneau River	1-2	103	127
Owyhee River	2	233	125
<u>UPPER SNAKE RIVER BASIN</u>			
Upper Snake - Wyoming	7-9	146	103
Camas-Beaver Creeks	2	115	161
Henrys Fork River	3	115	117
Teton River	3	133	145
Blackfoot River	2	147	--
Portneuf River	2	148	--
<u>GREAT BASIN</u>			
Montpelier Creek	2-4	150	109
Mink Creek	1-2	114	110
Cub River	1	143	--

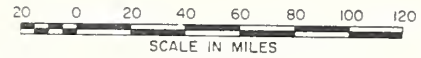


# SNOW WATER DEPTHS

As percent of 1953-67 15 year average

JANUARY 1, 1969

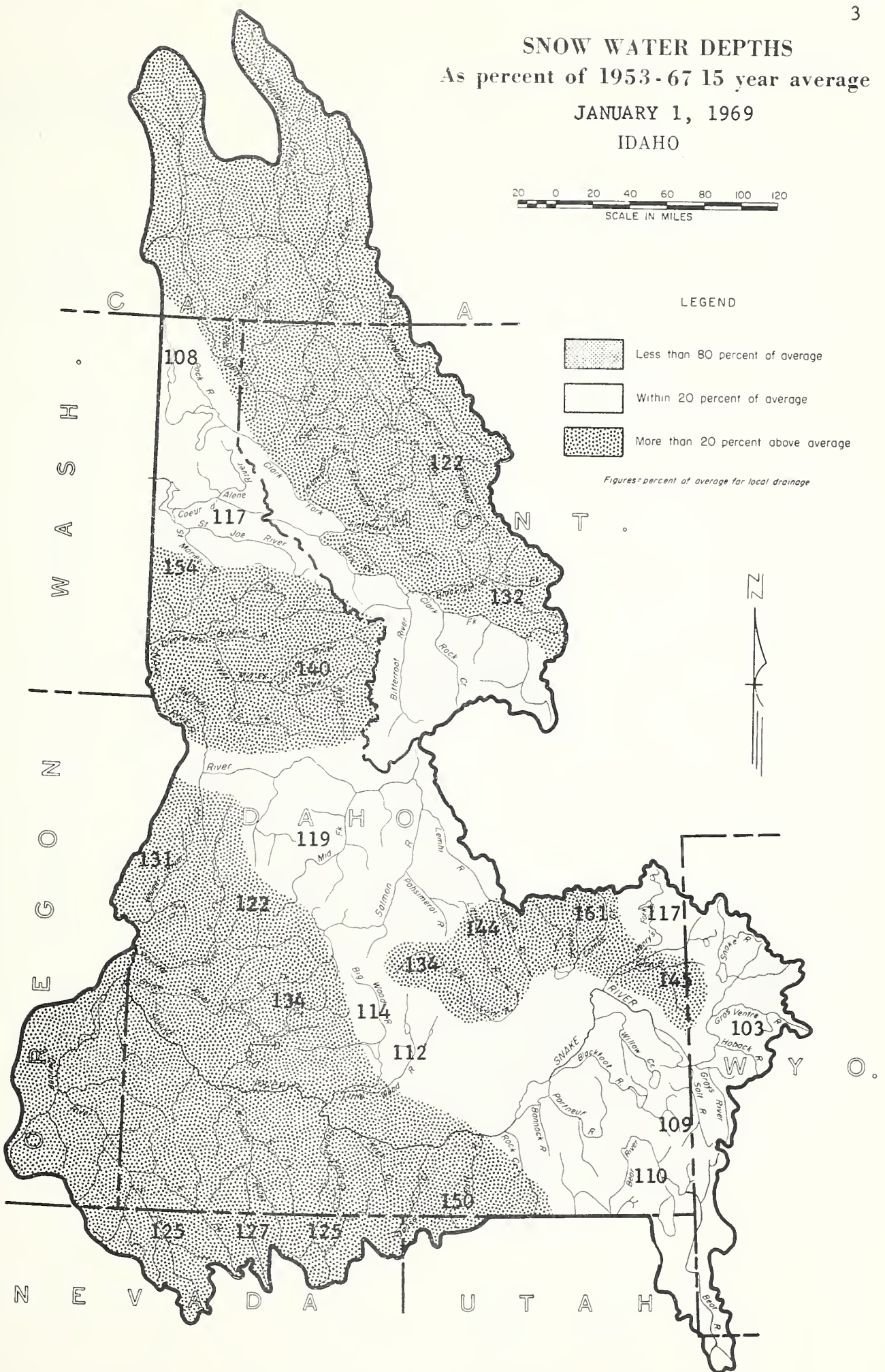
IDAHO



## LEGEND

- Less than 80 percent of average
- Within 20 percent of average
- More than 20 percent above average

Figures=percent of average for local drainage



## RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1953-57 AVERAGE
<u>UPPER COLUMBIA BASIN</u>				
<u>Clark Fork - Pend Oreille</u>				
Hungry Horse	3428.0	3147.0	2457.0	2766.0
Flathead	1791.0	1402.0	1473.0	1330.0
Pend Oreille	1561.0	969.6	556.9	915.9
Noxon	334.6	314.2	316.3	321.1*
<u>Spokane</u>				
Coeur d'Alene	238.5	165.2	107.4	136.8
<u>SNAKE BASIN</u>				
<u>Snake</u>				
Jackson Lake	847.0	621.0	591.7	440.1
Palisades	1200.0	1049.9	886.7	641.1
American Falls	1700.0	1268.4	1047.1	1241.1
Island Park	127.0	108.4	108.6	97.5
Grassy Lake	15.2	9.6	10.0	10.5
Brownlee	980.2	780.3	859.5	591.7
<u>Goose-Trapper Creeks</u>				
Oakley	74.4	10.8	8.4	11.2
<u>Salmon Falls Creek</u>				
Salmon Falls	182.6	13.4	13.2	19.9
<u>Big Lost</u>				
Mackay	44.2	35.0	22.5	28.8
<u>Big Wood</u>				
Magic	191.5	54.3	107.8	91.5
<u>Little Wood</u>				
Little Wood	30.0	15.5	14.8	8.6*
<u>Boise</u>				
Anderson Ranch	423.2	184.5	296.2	268.0
Arrowrock	286.6	186.7	171.0	227.7
Lucky Peak	278.2	21.0	28.5	118.9
Lake Lowell (Deer Flat)	169.0	136.2	123.0	109.1
<u>Owyhee</u>				
Owyhee	715.0	174.9	357.0	766.2
<u>Payette</u>				
Cascade	653.2	343.6	332.5	326.9
Deadwood	161.9	68.1	76.2	69.1
<u>Weiser</u>				
Mann Creek	11.1	3.8	3.4	--
<u>GREAT BASIN</u>				
<u>Bear</u>				
Bear Lake	1421.0	1076.0	1065.3	845.0
* Less than 15 years.				

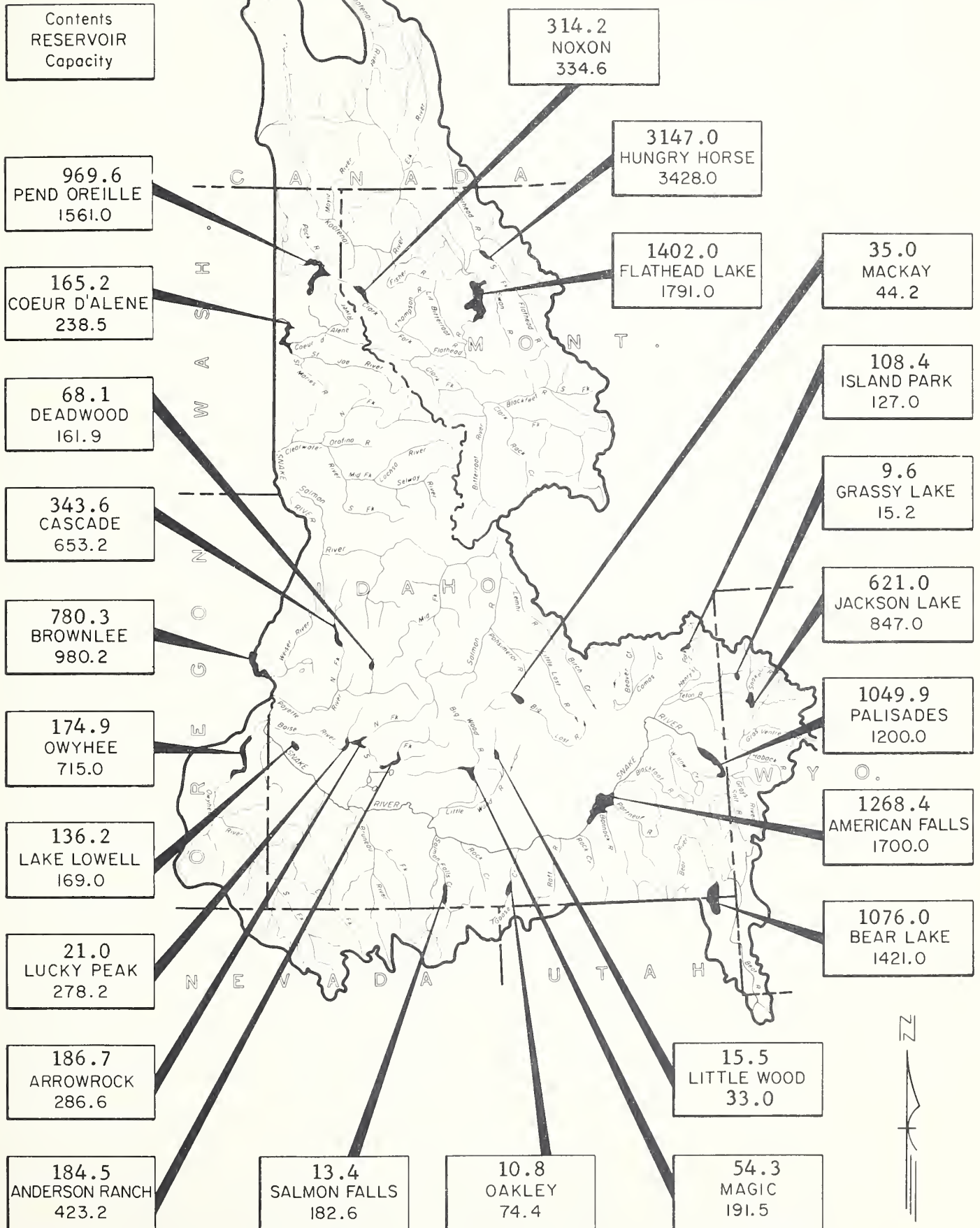


# RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JANUARY 1, 1969

50 0 50 100 150  
SCALE IN MILES





## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

UPPER COLUMBIA RIVER BASINPEND OREILLE - PRIEST RIVER

Benton Meadow	16A2	2344	1/2	22	3.7	3.6	3.2
Benton Spring	16A3	4900	1/1	37	9.1	6.2	8.6
Schweitzer Bowl	16A6	4500	12/27	69	18.5	10.7	--
Schweitzer Ridge	16A5	6100	12/27	104	29.7	15.7	--

SPOKANE RIVER

Fourth of July Smt.	16B3	3100	12/30	20	3.7	3.1	3.5*
Lookout	15B2	5250	12/27	77	18.8	11.8	15.7
Sherwin	16C1	3200	12/27	25	5.6	--	--

LOWER SNAKE RIVER BASINPALOUSE RIVER

Crumarine Creek	16C6	3340	12/26	20	4.4	1.2	2.5*
East Twin	16C3	4050	12/26	25	6.3	2.0	3.9*
Howard Creek	16C5	3450	12/26	14	3.0	0.0	1.6*
Moscow Mountain	16C2	4400	12/26	33	7.5	3.7	5.9*
West Twin	16C4	4250	12/26	21	4.8	1.1	3.0*

CLEARWATER RIVER

Above Greer	16C11	1240	1/6	7	1.3	0.0	--
Anderson Butte (A)	15D7	6800	1/3	75	17.2	15.1	--
Anderson Ridge (A)	15D8	5400	1/3	55	14.3	3.6	--
Buck Meadows (A)	15D5	5600	1/3	60	15.0	11.2	--
Cayuse Airstrip (A)	15C3	3700	1/3	50	10.6	--	3.6*
Coolwater Mtn. (R)	15C7	6200	1/8	--	15.5	13.3	--
Copper Butte (A)	15D10	6000	1/3	48	12.0	15.9	--
Cottonwood Butte	16C16	5140	12/30	30	6.8	--	--
Crater Meadows (A)	15C9	6100	1/3	90	22.0	--	--
Crooked Fork	14C10	3800	12/30	27	4.5	--	--
Disgrace Butte (A)	15D11	6600	1/3	59	14.2	12.2	--
Elk Mountain (A)	15D13	6900	1/3	96	22.1	19.2	--
Falls Point (A)	15C11	4600	1/3	51	13.8	10.8	--
Fish Lake Airstrip	15C2	5000		Delayed		--	16.8*
Goat Lake (A)	14C9	6600	1/3	83	20.2	--	--
Greer Summit	16C13	3000	1/6	9	2.2	0.0	--
Hemlock Butte (A)	16C6	5500	1/3	127	31.0	--	--
Hemlock Butte (R)	16C6	5500		Delayed		18.0	--
#Hoodoo Basin Mont.	15C8	6000	1/3	99	28.1	21.4	--
#Hoodoo Creek Mont.	15C1	5900	1/3	94	26.0	18.6	--
Horse Creek #1 (A)	15C14	5500	1/3	59	14.8	13.2	--
Horse Creek #4 (A)	15C15	5400	1/3	69	17.9	12.6	--
Horse Point (A)	15D21	5700	1/3	48	12.0	11.6	--

(b) 1953-67, 15 year period. \* Not located directly on this drainage. \* Estimated 1953-67, 15 year Average. (A) Aerial observation; Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>
Indian Hill (A)	15D22	6100	1/3	27	6.5	9.4	--
Lolo Pass	14C5	5230	12/30	60	12.8	--	--
Lower Snowhaven	16D7	5250	12/31	35	8.9	--	--
Meadow Cr. Lookout (A)	15D17	7000	1/3	85	19.6	14.0	--
Midway	16C12	2200	1/6	8	1.7	0.0	--
Mountain Meadows (A)	15D6	6300	1/3	45	10.8	12.2	--
Orogrande Mountain (R)	15D4	7800	1/8	--	24.8	24.6	--
Pierce Rgr. Sta.	15C5	3170	1/2	48	6.0	3.0	4.3*
Powell Rgr. Sta.	14C6	4230	12/30	27	5.0	--	--
Sable Hill (A)	15D20	6000	1/3	37	9.2	9.4	--
Shanghai Summit (A)	15C4	4600	1/3	72	15.3	--	--
Upper Snowhaven	16D4	5600	12/31	39	10.3	--	--

SALMON RIVER

Big Creek Summit	15E2	6600	12/27	74	17.5	8.6	17.0*
#Boulder Creek	16D1	5500	12/31	59	12.7	9.0	9.7*
Brundage Mountain	16D6	7560	12/27	90	23.9	14.9	--
Chapman Creek	16D2	4215	12/30	16	2.4	1.0	1.5*
#Galena Summit	14F12	8795	12/30	51	12.2	7.6	9.9
#Gibbons Pass Mont.	13D2	7100	12/31	43	10.4	10.7	9.6
Johns Creek	16D3	3805	12/30	11	1.4	0.0	1.1*
Mill Creek Summit	14E1	8870	1/2	43	12.0	8.3	--
Moose Creek	13D16	6200	12/26	28	5.8	6.2	--
Morgan Creek	14E4	7580	12/29	29	6.2	5.3	--
#Rock Flat Summit	16E1	5200	12/27	41	8.6	5.8	6.6
Whitebird Summit	16D5	4390	12/30	18	3.6	1.8	2.2*

Lemhi River

Above Gilmore	13E19	8200	12/31	22	5.2	2.7	--
Aspen-Hall Pass	13E21	8110	12/31	25	6.0	3.2	--
Copes Camp	13E17	7500	12/30	22	4.7	2.6	--
Gertson Creek (A)	13D17	8050	12/30	30	7.6	7.5	--
Hall Creek	13E20	7560	12/31	15	3.7	2.0	--
Meadow Lake	13E18	9100	12/31	33	8.6	7.2	--
Schwartz Lake	13E16	8500	12/30	29	7.4	4.8	--

(b) 1953-67, 15 year period. # Not located directly on this drainage. \* Estimated 1953-67, 15 year Average. (A) Aerial observation: Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

## SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
<u>SPOKANE RIVER</u>							
Fourth of July Summit	3100	48	11.6	12/30	10.2	9.2	10.1
Lookout	5250	48	11.0	12/27	8.5	8.3	7.9
<u>CLEARWATER RIVER</u>							
Brown	3100	30	6.7	12/13	5.7 <sup>d</sup>	5.6	1.9*
Midway	2200	36	6.1	12/13	5.0 <sup>d</sup>	5.2	1.7*
<u>SALMON RIVER</u>							
Mill Creek Summit	8870	48	8.4	1/2	6.8	6.6	3.4*
<u>Lemhi River</u>							
Above Gilmore	8200	60	5.4	12/31	4.3	3.0	1.7*
Meadow Lake	9100	48	4.4	12/31	2.6	2.1	1.3*
* Fall Measurement							
d December Measurement							

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

MIDDLE SNAKE RIVER BASIN - NORTHSIDELITTLE LOST RIVER

Fairview Guard Sta.	13E5	6750	12/30	17	3.5	1.6	1.6*
Lost Garfield	13E3	6600	12/30	15	3.5	1.4	1.5*
Moonshine	13E6	7450	12/30	28	6.4	3.8	4.8*
Sawmill Canyon	13E4	6900	12/30	24	4.0	3.8	3.5*
Wet Creek Summit	13E7	7600	12/28	31	5.2	3.7	4.3*

BIG LOST RIVER

Leadbelt	13F12	6800	12/27	25	4.6	--	--
White Knob	13F1	7700	12/31	19	3.9	4.2	2.9*

LITTLE WOOD RIVER

Garfield Rgr. Sta.	13F4	6554	1/3	22	4.8	2.8	4.2
Muldoon	13F5	6300	1/3	20	3.4	2.2	3.1

BIG WOOD RIVER

Galena	14F1	7300	12/30	42	9.0	5.5	7.8
Galena Summit	14F12	8795	12/30	51	12.2	7.6	9.9
Graham Ranch	14F5	6200	12/31	32	6.0	3.4	5.6
Mount Baldy	14F9	9000	12/29	52	9.3	5.0	8.8
Soldier Rgr. Sta.	14F11	6100	1/7	27	6.8	--	4.3*

BOISE RIVER

#Bogus Basin	16F2	6120	1/6	40	13.0	3.3	8.0
Bogus Basin Road	16F4	5360	1/6	18	5.5	1.6	1.9*
Moore's Creek Summit	15F1	6100	12/31	71	17.9	7.2	12.3
#Soldier Rgr. Sta.	14F11	6100	1/7	27	6.8	--	4.3*
Trinity Mountain	15F5	7780		Delayed		10.7	--

PAYETTE RIVER

#Big Creek Summit	15E2	6600	12/27	74	17.5	8.6	17.0*
Bogus Basin	16F2	6120	1/6	40	13.0	3.3	8.0
#Brundage Mountain	16D6	7560	12/27	90	23.9	14.9	--
Cozy Cove	15E8	5900	12/27	39	7.0	5.1	5.9
Deadwood Airstrip	15E10	5440	12/31	40	7.8	5.0	5.6*
Deadwood Dam	15E7	5290	12/30	43	9.8	4.0	6.5
Rock Flat Summit	16E1	5200	12/27	41	8.6	5.8	6.6

WEISER RIVER

Boulder Creek	16D1	5500	12/31	59	12.7	9.0	9.7*
---------------	------	------	-------	----	------	-----	------

(b) 1953-67, 15 year period. \* Not located directly on this drainage. \* Estimated 1953-67, 15 year Average. (A) Aerial observation; Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.



STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
<u>LITTLE LOST RIVER</u>							
Fairview Guard Station	5850	48	7.6	12/31	8.5	6.6	--
Wet Creek Summit	8175	48	17.1	12/28	16.3	14.5*	--
<u>LITTLE WOOD RIVER</u>							
Garfield R. S.	6554	36	5.2	1/3	3.6	2.8	3.3
<u>BIG WOOD RIVER</u>							
Galena	7300	48	10.1	12/31	8.5	8.4	5.5
<u>BOISE RIVER</u>							
Bad Bear	5500	72	6.3	12/31	5.6	4.1	2.1*
Bogus Basin	6120	48	13.1	1/6	12.1	5.6	7.7
Bogus Basin Road	4830	48	7.1	1/6	5.7	4.6	4.8
Moores Creek Summit	6100	60	8.8	12/31	8.1	7.6	7.4
* Fall Measurement							

\* Fall Measurement

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

MIDDLE SNAKE RIVER BASIN - SOUTHSIDERAFT RIVER

Howell Canyon	13G1	8000	12/31	53	14.1	4.5	9.4*
---------------	------	------	-------	----	------	-----	------

GOOSE CREEK

Badger Gulch	14G3	6660	12/27	27	5.6	1.7	3.3*
--------------	------	------	-------	----	-----	-----	------

SALMON FALLS CREEK

#Bear Creek (A)	15H1	7800	12/27	37	8.8	8.2	6.6*
Cedar Creek (A)	14G5	7000	12/26	21	4.4	1.8	--
Deadline	14G4	6900	12/27	49	10.3	5.6	8.1*
Goat Creek (A)	15H13	8800	12/27	36	7.5	5.7	6.8*
#Hummingbird Spgs. (A)	15H15	8945	12/27	37	8.8	7.9	7.0*
Magic Mountain	14G2	6700	12/27	39	8.3	4.2	6.3*
#Pole Creek R. S.	15H14	8330	12/30	32	7.8	7.6	6.5*
Red Point (A)	15H18	7940	12/27	19	4.5	4.1	2.8*
Wilson Creek (A)	15G2	7500	12/26	28	6.7	2.5	--

BRUNEAU RIVER

Bear Creek (A)	15H1	7800	12/27	37	8.8	8.2	6.6*
Hummingbird Spgs. (A)	15H15	8945	12/27	37	8.8	7.9	7.0*
Pole Creek R. S.	15H14	8330	12/30	32	7.8	7.6	6.5*

OWYHEE RIVER

#Bear Creek (A)	15H1	7800	12/27	37	8.8	8.2	6.6*
Silver City	16F3	6400	1/3	28	7.3	4.1	4.9*
South Mountain	16G1	6340	1/3	27	7.4	2.2	3.6*

(b) 1953-67, 15 year period. \* Not located directly on this drainage. \* Estimated 1953-67, 15 year Average. (A) Aerial observation; Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

## SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
<u>RAFT RIVER</u>							
Conner Pass	5700	36	9.8	10/1	8.0*	8.0*	8.0 <sup>f</sup>
Howell Canyon	8000	48	11.5	12/31	7.1	4.8	5.0
Sheep Hollow	6200	36	7.5	10/1	6.5*	2.0*	2.1*
Sublett	6000	36	7.0	10/2	5.4*	3.6*	4.5*
<u>GOOSE CREEK</u>							
Badger Gulch	6660	36	7.0	12/27	5.9	4.5*	5.4
<u>SALMON FALLS CREEK</u>							
Deadline	6900	36	7.4	12/27	7.0	5.4	5.6
Patrick Ranch	5720	36	7.7	12/30	4.5	4.7	3.9
Pole Creek R. S.	8330	36	9.7	12/30	6.2	4.4	5.1
<u>BRUNEAU RIVER</u>							
Bear Creek	7800	72	16.9	11/27	14.9 <sup>d</sup>	7.7	7.9*
<u>OWYHEE RIVER</u>							
Mud Flat	5500	48	12.8	9/27	10.8*	9.9*	12.2 <sup>f</sup>
Triangle	5150	48	16.2	9/27	13.4*	10.7*	--
* Fall Measurement							
f February Measurement							
d December Measurement							



## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

UPPER SNAKE RIVER BASINCAMAS-BEAVER CREEKS

Camp Creek	12E3	6800	12/30	26	5.1	4.7	3.5
Kilgore	11E12	6200	12/31	27	6.2	5.1	3.5*

HENRYS FORK RIVER

Big Springs	11E9	6500	12/30	41	8.4	5.9	7.2
Grassy Lake Wyo.	10E15	7230	12/31	59	15.9	12.9	13.4
Island Park	11E10	6315	12/30	36	6.4	4.4	5.6
Sawtelle Mountain	11E32	8715	12/30	56	15.0	--	--
Targhee Pass	11E34	7000	12/30	29	5.6	--	--
Valley View	11E8	6500	12/30	33	6.3	8.0	5.3

TETON RIVER

Darby Canyon (A)	10F21	8250	1/6	42	11.8	9.0	--
Freds Mountain	10F22	8000	1/3	45	11.6	--	--
Pine Creek Pass	11F2	6750	1/2	37	8.5	5.3	6.0*
State Line	11F1	6400	1/2	32	6.4	4.8	5.4
Teton Pass	10F13	8500	1/2	69	19.0	15.3	12.0

WILLOW CREEK

Bone	11F8	6200	1/2	17	3.3	2.1	--
Ozone	11F4	5800	1/2	T	T	2.0	--

SAND CREEK

Henry Creek	11F6	5650	12/31	13	2.6	2.3	--
Taylor Mountain	11F7	6500	12/31	12	2.4	--	--

BLACKFOOT RIVER

China Hat	11G2	6300	12/31	14	3.6	2.5	--
Somsen Ranch	11G1	7000	12/31	35	7.1	4.8	--

PORTNEUF RIVER

Lower Pebble	12G6	5800	12/30	39	5.0	3.8	--
Pebble Creek	12G2	6550	12/30	33	6.7	4.1	--

(b) 1953-67, 15 year period. \* Not located directly on this drainage. \* Estimated 1953-67, 15 year Average. (A) Aerial observation; Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

## SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
<u>HENRYS FORK RIVER</u>							
Island Park	6315	48	9.9	1/2	9.0	8.5	8.1
Valley View	6500	48	13.3	12/30	9.1	4.8	4.4
<u>TETON RIVER</u>							
Pine Creek Pass	6750	48	13.3	1/2	13.2	11.4	5.5
State Line	6400	48	14.8	1/2	13.0	13.5	10.2
Teton Pass	8500	48	10.5	1/2	8.1	9.2	8.7
<u>PORTNEUF RIVER</u>							
Lower Pebble	5800	36	7.6	12/30	7.9	6.2	4.0*
Pebble Creek	6550	48	7.2	12/30	6.2	4.3	3.2*
* Fall Measurement							

## SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (inches)	WATER CONTENT (inches)	WATER CONTENT (inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE <sup>b</sup>

## GREAT BASIN

BEAR RIVER

Emigrant Summit	11G6	7350	12/26	42	9.8	8.4	8.9*
-----------------	------	------	-------	----	-----	-----	------

Montpelier Creek

Giveout	11G16	6840	12/26	24	3.9	2.8	5.0*
Little Beaver	11G20	6970	12/26	26	4.7	3.2	6.4*
Lower Home Canyon	11G27	7500	12/27	29	5.9	--	--
Montpelier Creek	11G18	6570	12/31	21	4.2	2.7	4.1*
Upper Home Canyon	11G26	8500	1/1	43	10.7	--	--
Whiskey Flat	11G21	6985	12/26	18	3.3	2.0	4.3*

Mink Creek

#Emigrant Summit	11G6	7350	12/26	42	9.8	8.4	8.9*
Strawberry Creek	11G9	5800	12/31	29	5.1	4.7	--

Cub River

Cub River R. S.	11G12	5400	12/31	23	4.4	--	--
Willow Flat	11G4	6100	12/31	34	7.3	5.1	--

## SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
<u>BEAR RIVER</u>							
Emigrant Summit	7350	36	8.2	12/26	4.1	2.5	2.5
Strawberry Creek	5800	48	12.7	12/26	7.1	4.6	7.0
<u>Montpelier Creek</u>							
Giveout Pass	7025	36	9.4	12/26	4.0	2.4	2.4
Jenson Ranch	6580	48	18.7	12/26	8.8	6.2	5.6

(b) 1953-67, 15 year period. \* Not located directly on this drainage. \* Estimated 1953-67, 15 year Average. (A) Aerial observation; Water content estimated. (SP) Pressure Pellow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.



# Agencies and Organizations Cooperating in Idaho Snow Surveys

## GOVERNMENT AGENCIES

### Canada:

Department of Lands, Forests, and  
Water Resources, British Columbia  
Department of Resources and Development,  
Water Resources Division

### States:

Idaho State Reclamation Engineer  
State of Idaho Department of Fish and Game  
University of Idaho  
Idaho State University  
Montana Agricultural Experiment Station  
Montana State Water Conservation Board  
Nevada Cooperative Snow Surveys  
Oregon Agricultural Experiment Station  
Oregon Cooperative Snow Surveys  
Oregon State Engineer and Corps of  
State Watermasters  
Utah Cooperative Snow Surveys  
Wyoming Cooperative Snow Surveys

### Federal:

U. S. Army Engineers  
U. S. Department of Agriculture  
Forest Service  
Agricultural Research Service  
U. S. Department of Commerce  
Environmental Sciences Service Administration,  
Weather Bureau  
U. S. Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Fish and Wildlife Service  
Water Resources Division, Geological Survey  
Indian Service  
National Park Service  
Bureau of Land Management

## PUBLIC UTILITIES

The Montana Power Company  
Washington Water Power Company  
Idaho Power Company  
Utah Power and Light Company

## ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District  
Boise Project Board of Control  
Little Wood River Irrigation District  
Jordan Valley Irrigation District  
Salmon Falls Creek Irrigation Company  
Twin Falls Soil Conservation District  
Twin Lakes Irrigation Company  
Big Wood Irrigation Company  
Owyhee Project - North & South Board of Control

## PRIVATE CORPORATIONS

Amalgamated Sugar Company

*Other organizations and individuals furnish valuable information for  
snow survey reports. Their cooperation is gratefully acknowledged.*

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
P.O. BOX 38

BOISE, IDAHO 83707

OFFICIAL BUSINESS

POSTAGE AND FEES PAID  
U. S. DEPARTMENT OF AGRICULTURE

**FIRST CLASS MAIL**

FEDERAL - STATE - PRIVATE  
**COOPERATIVE SNOW SURVEYS**

Furnishes the basic data  
necessary for forecasting  
water supply for irrigation,  
domestic and municipal water  
supply, hydro-electric power  
generation, navigation,  
mining and industry

*"The Conservation of Water begins  
with the Snow Survey"*

USDA NATIONAL AGRICULTURAL LIBRARY  
CURRENT SERIAL RECORD  
WASHINGTON, D.C. 20050